

1. A closed circuit broadcast security receiver comprising:
 - a data receiving device adapted for receiving video data from a radio module transmitter configured at a first location to be monitored, said first data receiving device including:
 - a multi-antenna signal processing circuit being further adapted to:
 - (a) receive M independent RF modulated input signals from said radio module transmitter and other radio module transmitters representing said video data;
 - (b) process said M independent RF modulated input signals using a channel mixing matrix to extract said video data transmitted by said radio module transmitter and other radio module transmitters.
2. The closed circuit broadcast security receiver of claim 1, wherein said multi-antenna signal processing circuit is enabled and selectively operates in said second mode when channel conditions indicate that a data rate in said channel has fallen below a predetermined threshold.
3. The closed circuit broadcast security receiver of claim 1, wherein said multi-antenna signal processing circuit is enabled and selectively operates in response to a determination that a data rate in said channel is to be enhanced above a nominal operating rate.
4. The closed circuit broadcast security receiver circuit of claim 1, wherein said multi-antenna signal processing circuit is enabled and selectively operates in response to a determination that there is noise and/or interference in said channel.
5. The closed circuit broadcast security receiver circuit of claim 1, wherein said multi-antenna signal processing circuit is compatible with an 802.11x communications protocol.
6. The closed circuit broadcast security receiver circuit of claim 1 wherein said multi-antenna signal processing circuit is configured as a multiple-in, multiple out (MIMO) processor.

7. The closed circuit broadcast security receiver circuit of claim 1, wherein said multi-antenna signal processing circuit demodulates a data stream transmitted using multiple independent antennas which each transmit a portion of said data stream, which data stream represents captured video from N separate radio module transmitters.
8. The closed circuit broadcast security receiver circuit of claim 1, wherein said multi-antenna signal processing circuit generates a speculative response to ensure that said data receiving device complies with timing requirements of a communications protocol.
9. The closed circuit broadcast security receiver circuit of claim 8, wherein said timing requirements are associated with an 802.11x compatible data link.

10. A closed circuit video system comprising:
- a first data capture device for monitoring and capturing video data from a first location;
- 5 said first data capture device further including a radio module transmitter to transmit said data to a second data storage location;
- a first data receiving device at a second separate location for receiving said video data from said radio module transmitter, said first data receiving device including:
- 10 a multi-antenna signal processing circuit being further adapted to:
- (a) receive M independent RF modulated input signals from said radio module transmitter and other radio module transmitters representing said video data;
- (b) process said M independent RF modulated input signals using a channel
- 15 mixing matrix to extract said video data transmitted by said radio module transmitter and other radio module transmitters;
- a data storage device for storing said video data captured from said first monitored location and transmitted to said first data receiving device.
- 20 11. The closed circuit video system of claim 10, wherein said first data capture device is used as part of a security system,
12. The closed circuit video system of claim 10, wherein said multi-antenna signal processing circuit is incorporated within a personal digital assistant.
13. The closed circuit video system of claim 10, wherein said first data capture device is a
- 25 digital camera.
14. The closed circuit video system of claim 10, wherein said multi-antenna signal processing circuit receives and processes video data from N radio module transmitters simultaneously.
15. The closed circuit video system of claim 10 wherein said radio module transmitter is
- 30 configured to transmit said RF modulated signals selectively to said second separate location.

16. The closed circuit video system of claim 10 wherein said first data capture device transmits said video data using N separate antennas simultaneously as N separate bit streams.

17. A radio frequency (RF) multi-antenna video data receiver implemented in a single chip integrated circuit chip (IC) comprising:
- 5 a multi-antenna signal processing circuit within the single chip IC being adapted to:
- (a) receive M independent RF modulated input signals from N separate video camera radio module transmitters, where $N > 1$;
- (b) simultaneously process said M independent RF modulated input signals
- 10 using a channel mixing matrix to extract N video data signals transmitted by said N separate video camera radio module transmitters;
- wherein said multi-antenna signal processing circuit is operated selectively to enhance an operating transmission range and/or an operating data rate of one or more separate baseband processors which also receive video data from said N separate video
- 15 camera radio module transmitters.
18. The RF multi-antenna video data capture system of claim 17, wherein said multi-antenna signal processing circuit processes at least 4 separate input signals representing a data stream multiplexed over 4 separate bit streams.
- 20 19. The RF multi-antenna access point system of claim 17, wherein space division multiple access is realized by separating different RF signals from different signal paths simultaneously in the single chip IC.
20. The RF multi-antenna access point system of claim 17, wherein a localized encryption is achieved by independently controlling an energy modulation of
- 25 separate transmission antennas used simultaneously by each of said M separate transmission signals, so that data signals received by unintended recipients are indistinguishable from noise.